## Karen J Reynolds

List of Publications by Year in descending order

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83 1,405 21 34 papers citations h-index g-index

84 84 84 1791

times ranked

citing authors

docs citations

all docs

#	Article	IF	CITATIONS
1	Application of the digital volume correlation technique for the measurement of displacement and strain fields in bone: A literature review. Journal of Biomechanics, 2014, 47, 923-934.	0.9	122
2	The comparison of different feed forward neural network architectures for ECG signal diagnosis. Medical Engineering and Physics, 2006, 28, 372-378.	0.8	112
3	Usability of Tablet Computers by People with Early-Stage Dementia. Gerontology, 2013, 59, 174-182.	1.4	89
4	Effect of Screw Torque Level on Cortical Bone Pullout Strength. Journal of Orthopaedic Trauma, 2007, 21, 117-123.	0.7	73
5	Reducing power line interference in digitised electromyogram recordings by spectrum interpolation. Medical and Biological Engineering and Computing, 2004, 42, 524-531.	1.6	67
6	Detecting early bone changes using in vivo micro-CT in ovariectomized, zoledronic acid-treated, and sham-operated rats. Osteoporosis International, 2010, 21, 1371-1382.	1.3	61
7	Learning to apply effective cricoid pressure using a part task trainer. Anaesthesia, 2002, 57, 1098-1101.	1.8	51
8	Heart rate variability indices for very short-term (30 beat) analysis. Part 1: survey and toolbox. Journal of Clinical Monitoring and Computing, 2013, 27, 569-576.	0.7	48
9	Heart rate variability indices for very short-term (30 beat) analysis. Part 2: validation. Journal of Clinical Monitoring and Computing, 2013, 27, 577-585.	0.7	42
10	The effect of dyshemoglobins on pulse oximetry: Part I, theoretical approach and part II, experimental results using an in vitro test system. Journal of Clinical Monitoring and Computing, 1993, 9, 81-90.	0.6	40
11	Regional Heterogeneity in the Configuration of the Intracortical Canals of the Femoral Shaft. Calcified Tissue International, 2015, 97, 327-335.	1.5	32
12	Micro-CT examination of human bone: from biopsies towards the entire organ. Annali Dell'Istituto Superiore Di Sanita, 2012, 48, 75-82.	0.2	32
13	Systematic mapping of the subchondral bone 3D microarchitecture in the human tibial plateau: Variations with joint alignment. Journal of Orthopaedic Research, 2017, 35, 1927-1941.	1.2	30
14	Quantification of human bone microarchitecture damage in press-fit femoral knee implantation using HR-pQCT and digital volume correlation. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 278-287.	1.5	28
15	Toward Photorealism in Endoscopic Sinus Surgery Simulation. American Journal of Rhinology and Allergy, 2013, 27, 138-143.	1.0	27
16	Detection of biomarkers in body fluids using bioprobes based on aggregation-induced emission fluorogens. Materials Chemistry Frontiers, 2020, 4, 2548-2570.	3.2	27
17	Does cancellous screw insertion torque depend on bone mineral density and/or microarchitecture?. Journal of Biomechanics, 2014, 47, 347-353.	0.9	25
18	Relationships between inÂvivo dynamic knee joint loading, static alignment and tibial subchondral bone microarchitecture in end-stage knee osteoarthritis. Osteoarthritis and Cartilage, 2018, 26, 547-556.	0.6	25

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19	Safety and effectiveness of â€^hospital in the home' and â€^outpatient parenteral antimicrobial therapy' ir different age groups: A systematic review of observational studies. International Journal of Clinical Practice, 2018, 72, e13216.	า 0.8	25
20	Predicting cancellous bone failure during screw insertion. Journal of Biomechanics, 2013, 46, 1207-1210.	0.9	23
21	Early Airway Structural Changes in Cystic Fibrosis Pigs as a Determinant of Particle Distribution and Deposition. Annals of Biomedical Engineering, 2014, 42, 915-927.	1.3	23
22	A Detachable Electronic Device for Use With a Long White Cane to Assist With Mobility. Assistive Technology, 2014, 26, 219-226.	1.2	21
23	Pullout strength of cancellous screws in human femoral heads depends on applied insertion torque, trabecular bone microarchitecture and areal bone mineral density. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 40, 354-361.	1.5	20
24	Airflow resistance and CO2 rebreathing properties of anti-asphyxia pillows designed for epilepsy. Seizure: the Journal of the British Epilepsy Association, 2014, 23, 462-467.	0.9	15
25	The effect of variability in body segment parameters on joint moment using Monte Carlo simulations. Gait and Posture, 2014, 39, 346-353.	0.6	14
26	Joint loading and proximal tibia subchondral trabecular bone microarchitecture differ with walking gait patterns in end-stage knee osteoarthritis. Osteoarthritis and Cartilage, 2017, 25, 1623-1632.	0.6	14
27	The relationship between tibiofemoral geometry and musculoskeletal function during normal activity. Gait and Posture, 2020, 80, 374-382.	0.6	14
28	Development and validation of a generic 3D model of the distal femur. Computer Methods in Biomechanics and Biomedical Engineering, 2006, 9, 305-312.	0.9	13
29	The accuracy of three-dimensional reconstructions of the ovine knee: dissectional validation. Computerized Medical Imaging and Graphics, 2002, 26, 171-175.	3.5	12
30	Electronic textile electrocardiogram monitoring in cardiac patients. JBI Database of Systematic Reviews and Implementation Reports, 2019, 17, 147-156.	1.7	12
31	Optical-Based Biosensors and Their Portable Healthcare Devices for Detecting and Monitoring Biomarkers in Body Fluids. Diagnostics, 2021, 11, 1285.	1.3	12
32	Acoustic analysis of the closing sounds of implanted prosthetic heart valves. Journal of the Acoustical Society of America, 1995, 98, 69-77.	0.5	11
33	Electronic textile-based electrocardiogram monitoring in cardiac patients: a scoping review. JBI Database of Systematic Reviews and Implementation Reports, 2019, 17, 1958-1998.	1.7	11
34	Customization of a generic 3D model of the distal femur using diagnostic radiographs. Journal of Medical Engineering and Technology, 2008, 32, 156-161.	0.8	10
35	Vessel calibre and haemoglobin effects on pulse oximetry. Physiological Measurement, 2009, 30, 869-883.	1.2	10
36	Virtual Reality Grocery Shopping Simulator: Development and Usability in Neurological Rehabilitation. Presence: Teleoperators and Virtual Environments, 2012, 21, 183-191.	0.3	10

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37	Comparing surgical experience with performance on a sinus surgery simulator. ANZ Journal of Surgery, 2016, 86, 990-995.	0.3	10
38	Time-elapsed screw insertion with microCT imaging. Journal of Biomechanics, 2016, 49, 295-301.	0.9	10
39	Automated Bone Screw Tightening to Adaptive Levels of Stripping Torque. Journal of Orthopaedic Trauma, 2017, 31, 321-325.	0.7	10
40	Protocol for a randomised crossover trial to evaluate patient and nurse satisfaction with electronic and elastomeric portable infusion pumps for the continuous administration of antibiotic therapy in the home: the Comparing Home Infusion Devices (CHID) study. BMJ Open, 2017, 7, e016763.	0.8	10
41	Tibial cartilage, subchondral bone plate and trabecular bone microarchitecture in varusâ€Âand valgusâ€osteoarthritis versus controls. Journal of Orthopaedic Research, 2021, 39, 1988-1999.	1.2	10
42	Detection of mechanical changes to prosthetic heart valves by spectral analysis of valve closing sounds. Journal of the Acoustical Society of America, 1995, 98, 60-68.	0.5	9
43	Virtual reality surgical simulator software development tools. Journal of Simulation, 2013, 7, 101-108.	1.0	9
44	The correlation between optical coherence tomography retinal shape irregularity and axial length. PLoS ONE, 2019, 14, e0227207.	1.1	8
45	Developing a national research and development centre in assistive technologies for independent living. Australian Health Review, 2009, 33, 152.	0.5	8
46	Developing a fluorescent sensing based portable medical open-platform - a case study for albuminuria measurement in chronic kidney disease screening and monitoring. Sensing and Bio-Sensing Research, 2022, 37, 100504.	2.2	8
47	The influence of slice thickness on the volume measurement accuracy of 3-D MR reconstructions of acrylic phantoms: a precursor to knee imaging. Radiography, 2004, 10, 277-285.	1.1	7
48	Can short-term heart rate variability be used to monitor fentanyl–midazolam induced changes in ANS preceding respiratory depression?. Journal of Clinical Monitoring and Computing, 2015, 29, 393-405.	0.7	7
49	Estimation of heart rate during sleep measured from a gyroscope embedded in a CPAP mask. , 2016, , .		7
50	Correlated Poincar $\tilde{A}$ $\otimes$ indices for measuring heart rate variability. Australasian Physical and Engineering Sciences in Medicine, 2007, 30, 336-41.	1.4	7
51	"Turn-of-the-Nut―Method Is Not Appropriate for Use in Cancellous Bone. Journal of Orthopaedic Trauma, 2015, 29, e437-e441.	0.7	6
52	Flow rate accuracy of ambulatory elastomeric and electronic infusion pumps when exposed to height and back pressures experienced during home infusion therapy. Expert Review of Medical Devices, 2019, 16, 735-742.	1.4	6
53	Safety and Clinical Outcomes of Hospital in the Home. Journal of Patient Safety, 2020, 16, 123-129.	0.7	6
54	Technological Review of Pulse Oximeter Simulators. Journal of Clinical Engineering, 2002, 27, 287-297.	0.1	5

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55	A model for the change of cancellous bone volume and structure over time. Mathematical Biosciences, 2012, 240, 132-140.	0.9	5
56	Discrete tomography in an in vivo small animal bone study. Journal of Bone and Mineral Metabolism, 2018, 36, 40-53.	1.3	5
57	Dermal thickness and echogenicity using DermaScan C high frequency ultrasound: Methodology and reliability testing in people with and without primary lymphoedema. Skin Research and Technology, 2020, 26, 813-823.	0.8	5
58	Subregional DXA-Derived Vertebral Bone Mineral Measures are Stronger Predictors of Failure Load in Specimens with Lower Areal Bone Mineral Density, Compared to Those with Higher Areal Bone Mineral Density. Calcified Tissue International, 2014, 95, 97-107.	1.5	4
59	Personalised 3D knee compliance from clinically viable knee laxity measurements: A proof of concept ex vivo experiment. Medical Engineering and Physics, 2019, 64, 80-85.	0.8	4
60	Exaggerated ventilatory drive estimates from epiglottic and esophageal pressure deflections in the presence of airway occlusion. Journal of Applied Physiology, 2021, 131, 760-767.	1.2	4
61	The effect of base image window level selection on the dimensional measurement accuracy of resultant three-dimensional image displays. Radiography, 2003, 9, 211-218.	1.1	3
62	Dimensional measurement of structural features of the ovine knee using three-dimensional reconstructed imaging: intra- and inter-observer repeatability. Radiography, 2004, 10, 269-276.	1.1	3
63	Temperature variation in the home setting: implications for continuous ambulatory infusions. Journal of Pharmacy Practice and Research, 2017, 47, 431-437.	0.5	3
64	A wearable device for monitoring patients during PAP therapy. , 2017, , .		3
65	A Modified Mask for Continuous Cardiac Monitoring during Positive Airway Pressure Therapy. , 2018, 2018, 4363-4366.		3
66	Noninvasive detection of bilirubin using pulsatile absorption. Australasian Physical and Engineering Sciences in Medicine, 2006, 29, 78-83.	1.4	3
67	Threeâ€dimensional reconstructed MRI of an acrylic meniscal cartilage phantom: The effect of acquisition slice thickness upon accuracy of volume measurement. Radiographer, 2004, 51, 77-80.	0.1	2
68	Edge concealment in a combined surface mesh and scalar-field tissue model for surgical simulations. Simulation, 2014, 90, 216-223.	1.1	2
69	Real-time interactive isosurfacing: a new method for improving marching isosurfacing algorithm output and efficiency. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 213-220.	0.9	2
70	A Wearable Ballistocardiography Device for Estimating Heart Rate During Positive Airway Pressure Therapy: Investigational Study Among the General Population. JMIR Cardio, 2021, 5, e26259.	0.7	2
71	Relationships between tibial articular cartilage, <i>in vivo</i> external joint moments and static alignment in endâ€stage knee osteoarthritis: A micro T study. Journal of Orthopaedic Research, 2022, 40, 1125-1134.	1.2	2
72	Survey of Poincaré indices for measuring heart rate variability. Australasian Physical and Engineering Sciences in Medicine, 2006, 29, 97-101.	1.4	2

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73	Hapteo: Sharing visual-haptic experiences from virtual environments. , 2014, , .		1
74	Quantifying shape changes of silicone breast implants in a murine model using ⟨i⟩in vivo⟨li⟩ micro T. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 1447-1452.	1.6	1
<b>7</b> 5	Automated Computational Diagnosis of Peripheral Retinal Pathology in Optical Coherence Tomography (OCT) Scans using Graph Theory. , 2020, , .		1
76	Preliminary Analysis of a Wireless and Wearable Electronic-Textile EASI-Based Electrocardiogram. Frontiers in Cardiovascular Medicine, 2021, 8, 806726.	1.1	1
77	Functional Evaluation of Pulse Oximeter Simulators. Journal of Clinical Engineering, 2003, 28, 174-182.	0.1	O
78	Medical devices: partnering for success. Australasian Physical and Engineering Sciences in Medicine, 2009, 32, xi-xii.	1.4	0
79	The Use of Computerised Simulation for the Training of Endoscopic Sinus Surgery. Current Otorhinolaryngology Reports, 2016, 4, 276-279.	0.2	О
80	A systematic mapping of tibial plateau bone microarchitecture in end-stage knee osteoarthritis. Osteoarthritis and Cartilage, 2016, 24, S248-S249.	0.6	0
81	A new versatile hand dynamometer. Australasian Physical and Engineering Sciences in Medicine, 2006, 29, 53-6.	1.4	О
82	EyeSim-an ophthalmic response simulator. Australasian Physical and Engineering Sciences in Medicine, 2006, 29, 84-7.	1.4	0
83	Evaluation of the Quality of Sterile Compounding Videos Available on the YouTube Video-sharing Website. International Journal of Pharmaceutical Compounding, 2019, 23, 238-244.	0.0	O